



Docket No. CEL1.0011

Patent Application

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Anthony et al.

Serial No.: 09/669,308

Filed: September 25, 2000

For: COMPOUND LOUDSPEAKER  
HAVING A MAGNET SYSTEM

Examiner: Suhan Ni

Group Art Unit: 2643

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SEP 03 2003

Technology Center 2600

**RESPONSE TO ADVISORY ACTION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Please enter the following amendment in response to the Advisory Action dated July 28, 2003. The prior Final Office Action is dated March 27, 2003 with a shortened statutory period for response expiring on June 27, 2003. A request for two-month extension is submitted herewith along with the appropriate fee. A duplicate copy of this cover is additionally submitted for that purpose. If necessary, please charge any fees or credit any overpayment to Deposit Account No. 01-1960.

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**SECTION A: AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application.

D' 1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Previously Presented) A high frequency transducer, comprising:  
a first diaphragm having a first coil thereon;  
a second diaphragm having a second coil thereon formed on a periphery  
said first diaphragm;  
a first seat having a first magnet structure, said first seat defining an  
annular opening to allow said second coil to be moveably suspended therein; and

a second seat having a second magnet structure, said second seat and said second magnet defining an annular gap to allow said first coil to be moveably suspended therein, wherein said first and second magnets are substantially disk shaped, such that said second seat is positioned on said first seat to enclose said first magnet therein but does not occlude said annular opening.

<sup>2</sup>~~9~~. (Previous Presented) The invention of Claim <sup>1</sup>~~8~~, wherein a disk shaped plate is placed on said second magnet and does not occlude said annular gap.

<sup>3</sup>~~10~~. (Previously Presented) The invention of Claim <sup>2</sup>~~9~~, wherein a substantially annular wall extends from an outer periphery of said second seat to encompass said second magnet and said plate.

<sup>4</sup>~~11~~. (Previously Presented) The invention of Claim <sup>3</sup>~~10~~, wherein a lip extends inwardly to define said gap between said lip and said plate.

12. (Canceled)

13. (Canceled)

14. (Canceled)

5 15. (Previously Presented) A high frequency loud speaker, comprising:

- a first diaphragm having a first coil thereon;
- a second diaphragm having a second coil thereon formed on a periphery of said first diaphragm;
- a first seat having an annular first wall extending therefrom and encircling a first magnet having a flat structure therein, said first wall and said first magnet defining an annular opening therebetween to allow said second coil to be moveably suspended therein; and
- a second seat having a second annular wall extending therefrom and encircling a second magnet having a flat structure, said second wall and said second magnet defining an annular gap to allow said first coil to be moveably suspended therein.

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6 16. (Previously Presented) The invention of Claim 5, wherein said first and second magnets have a substantially disk shaped structure.

7 17. (Previously Presented) The invention of Claim 6, wherein said seat is positioned on said first seat to enclose said first magnet therein but does not occlude said annular gap.

8 18. (Previously Presented) The invention of Claim 7, wherein said first and second magnets are magnetized after said second seat is positioned over said first seat.

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19. (Previously Presented) The invention of Claim 18<sup>8</sup>, wherein a plate is concentrically placed upon said second magnet, and said plate also accommodates a domed diaphragm thereon on a side opposing said second magnet.

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20. (Currently Amended) A high frequency transducer, comprising:  
a first dome shaped diaphragm having a first coil thereon;  
a second conical diaphragm having a second coil thereon formed on a periphery of said first diaphragm;

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a first seat having a first disk shaped magnet, said first seat and said magnet defining an annular opening to allow said second coil to be moveably suspended therein;

at least an aperture being defined through said first seat and being positioned between said first magnet and said first seat;

a second seat having a second magnet structure, said second seat and said second magnet defining an annular gap to allow said first coil to be moveably suspended therein;

said second seat being positioned over said first seat to encompass said first magnet therein without occluding said annular opening;

at least a void being defined through said second seat, said void being in substantial axial alignment with said aperture.

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